

REMARKS

With the amendments, claims 1-4, 6-9, 11-18, and 20 remain pending. Claim 1 and Paragraph [0003] are amended to incorporate the limitation of claim 19. Accordingly, claim 19 is cancelled and the dependency of claim 20 changed. The limitation of claim 10 is incorporated into claim 1, and claim 10 is cancelled. Finally, claim 1 is amended to specify an electrolytic medium comprising a non-aggressive acid or base as disclosed at least in paragraph 15.

Applicant's representative apologizes for the unfortunate re-submission of an earlier amendment; the amendments now submitted and discussion that follows address the issues raised in the most recent Office Action.

Rejection Under 35 U.S.C. § 103(a) over Zaki in view of Bruno et al. or Cooke et al. and in View of Polan et al.

Claims 1, 2, 4, and 6-20 have been rejected as unpatentable over Zaki, "Electrocleaning" in view of either Bruno et al., U.S. Patent No. 4,495,008 or Cooke et al., U.S. Patent No. 1,169,770 and in view of Polan et al., U.S. Patent No. 4,568,431. Applicants respectfully traverse the rejection with respect to the amended claims.

The combined references fail to disclose or suggest at least the features of an electrolyte medium comprising a non-aggressive acid or base and a current density of less than one amp per square decimeter.

The Naki publication describes cleaning using a strong base, sodium hydroxide. Page 137, Table II. The Naki publication teaches using at least 2 A/dm^2 . Page 136, Table I.

The Bruno patent teaches an electrolytic degreasing using a strong base, again NaOH, with a current density of 10 A/dm^2 . Example 1. The metal is pickled with a strong acid solution (sulfuric acid) and phosphated. Abstract; col. 2, lines 21-41; Example 1, col. 3, lines 8-17.

The Cooke patent teaches treating with caustic alkali, then electroplating. Abstract; col. 2, lines 11-12; col. 5, line 46 to col. 6, line 19.

The Polan patent describes using caustic, specifically sodium hydroxide solution, for cleaning. Col. 5, lines 2-35. Current densities are given in mA/cm² in lines 60-63. The Polan patent does not concern removing adhered metal particle matter. Polan describes a process of electrolytic cleaning to remove “residual grease, oil and other contaminants” in column 5. The electrolytic cleaning technique is said to “enhance the solvent action of the caustic [cleaning] solution” by the agitation produced by the hydrogen bubbles. Col. 5, lines 14-18. The Polan patent again equates cleaning with degreasing at the end of that paragraph. *Id.* at line 23. Again, in column 4, lines 60-61 and again at line 68, Polan teaches that it is bulk oil and grease that is removed in the cleaning step. In addition, the only source Polan mentions for its particulate filtered from its replenishment system is “from the atmosphere.” Col. 1, line 23; col. 12, line 50; col. 14, lines 5-6.

In view of these disclosures, it is unexpected and could not have been foreseen that the presently claimed method could be effective for separating adhered particle matter from conductive substrates.

Reconsideration of the claims and withdrawal of the rejection are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) over Zaki in view of Bruno et al. or Cooke et al. and in View of Polan et al. and Further in View of Lauke

Claim 3 has been rejected as unpatentable over Zaki, “Electrocleaning” in view of either Bruno et al., U.S. Patent No. 4,495,008 or Cooke et al., U.S. Patent No. 1,169,770 and in view of Polan et al., U.S. Patent No. 4,568,431 and further in view of Lauke, U.S. Patent No. 4,568,438. Applicants respectfully traverse the rejection with respect to the claim as amended by the

amendment to its independent claim, claim 1.

The Lauke patent is cited as teaching an eductor. The Lauke patent does not, however, teach or suggest either an electrolyte cleaning medium comprising a non-aggressive acid or base or a current density of less than one amp per square decimeter.

Applicants, accordingly, respectfully request withdrawal of the rejections and reconsideration of the claims.

Conclusion

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,



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